



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,341	10/21/2003	Michael J. Renn	ODC-2003-2-NPA	6655
5179	7590	09/16/2004	EXAMINER	
PEACOCK MYERS AND ADAMS P C			HEALY, BRIAN	
P O BOX 26927			ART UNIT	
ALBUQUERQUE, NM 871256927			PAPER NUMBER	
			2883	

DATE MAILED: 09/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/691,341	<b>Applicant(s)</b> RENN, MICHAEL J.	
	<b>Examiner</b> Brian M. Healy	<b>Art Unit</b> 2883	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on the response filed 6/21/2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-6,8-17,27-31,34,38-45 and 48-55 is/are rejected.
- 7) ☒ Claim(s) 2,3,7,18-26,32,33,35-37,46,47 and 56-58 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>09082004</u> . | 6) <input type="checkbox"/> Other: <u>Brian M. Healy</u>                                |

**Election/Restrictions**

The response to the restriction requirement, filed 6/21/2004, has been considered and Applicant's Arguments have been found to be persuasive. The restriction requirement has been withdrawn and all of claims 1-58 will be examined on the merits.

**Allowable Subject Matter**

Claims 2 ,3,7 ,18-26,32,33,35-37, 46,47, and ~~56~~-58 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. None of the prior art references teaches or suggests the listed claimed features in the dependent claims such as having the fluid be gas or air, using the propelling step which comprises propelling the particles at a velocity higher than achievable by optical propulsion; and having the liquid droplets comprising a precursor. These features are recited in the aforementioned claims.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,4-6 and 8-17. 27-31, 34, 38-45 and 48-55 are rejected under 35 U.S.C. 102(b) as being anticipated by Askin et. al., U.S.P. No. 4,893,886.

Askin et. al. 886' teaches (Figs.1-5) a method of depositing material on a substrate comprising the steps of entraining a plurality of particles of particulate matter using a laser 30 (this can be biological particles) within a stream of co-flowing material (Note Figs.3-5) in cell 25 and propelling the particles towards a substrate (see Col.3, lines 23-30 wherein the biological particles can be mounted and/or deposited upon a transparent slide substrate) and depositing the biological particles upon a substrate. In Figs.3-5 the fluid stream includes a hollow/barrier/sheath portion and the lateral spreading of the particles appear to be limited. The teachings of Askin et. al. 886', clearly, fully meets Applicant's claimed limitations.

A copy of PTO-1449 will be included in this office action.

The following references are also cited by the Examiner as being pertinent prior art: Renn, U.S.P. No.6,636,676, ~~Ren~~ (Note entire reference.), Englesberg et. al., U.S.P. No. 5,958,268 (Figs.1-8), Liu, U.S.P. No.6,159,749 (Figs.1-5), Askin et. al., U.S.P. No. 4,092,535 (Figs.1-5), Finer et. al., U.S.P. No. 5,512,745 (Figs.1-8D), and Marchitto et. al., U.S.P. No.6,573,491 (Figs.1-6).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian M. Healy whose telephone number is (571) 272-

2347. The examiner can normally be reached on Compressed Schedule Tues-Thurs.  
7Am-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on (571)272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brian M. Healy  
Primary Examiner  
Art Unit 2883

\*\*\*



Brian Healy  
Primary Examiner